MAR 3 1 2006

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Applicant(s):

Joseph Young J. PAIK

Application No.: 10/665,165

107262.179 US2

Filing Date:

September 18, 2003

Atty Docket No.: 007734 FPS/MMCS/APC

SMA/lrm

Entitled:

Feedback Control of a Chemical Mechanical Polishing Process for Multi-Layered Films

RECEIPT IS ACKNOWLEDGED FOR THE FOLLOWING:

[X] Information Disclosure Statement

26 Pages of Form PTO-1449 [X]

[X] 267 References

Docket No.: 007734 FPS/MN. APC PATENT/OFFICIAL

MAR 3 1 2006

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Joseph Young J. PAIK

Serial No. 10/665,165

Filed: September 18, 2003

Group Art Unit:

Examiner:

For: FEEDBACK CONTROL OF A CHEMICAL MECHANICAL POLISHING PROCESS FOR MULTI-LAYERED FILMS

INFORMATION DISCLOSURE STATEMENT

Honorable Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In accordance with the provisions of 37 C.F.R. 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the documents listed on the attached form PTO-1449. It is respectfully requested that the documents be expressly considered during the prosecution of this application, and that the documents be made of record therein and appear among the "References Cited" on any patent to issue therefrom. Copies of any cited U.S. Patents and U.S. Patent Publications are not being submitted in accordance with 37 CFR 1.98(a)(2)(i).

This Information Disclosure Statement is being filed within three months of the U.S. filing date OR before the mailing date of a first Office Action on the merits. No certification or fee is required.

In accordance with 37 C.F.R. § 1.97(g) and (h), the filing of this IDS should not be construed as a representation that a search had been made or that information cited is, or is considered to be, material to patentability as defined in 37 C.F.R.§ 1.56 (b), or that any cited document listed or attached is (or constitutes) prior art. Unless otherwise indicated, the date of

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publication indicated for an item is taken from the face of the item, and Applicant reserves the right to prove that the date of publication is in fact different.

The references listed on Sheet 1 of the attached PTO-1449 Forms were cited in a patentability investigation and/or a corresponding foreign or PCT application relating to the above-referenced application. The remaining references are from potentially related patent applications, and possibly other sources.

No fee is believed to be required; however, the Commissioner is authorized to charge any deficiency in any fees pursuant to 37 CFR § 1.17 associated with this communication and to credit any excess payment to Deposit Account No. 08-0219.

Respectfully submitted,

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FAX 202.942.8484 Data: 6//////

SHEET 1 OF 26

INF	ORMATION I	DISCLOS	SURE	ATTY. DOCKET N		SERIAL NO	-		
	CITATION	IN AN		007734 FPS/MMC	CS/APC	10/665,16	55		
	APPLICA	TION							
01	PE (PTO-14	449)							
	TA OS	,		APPLICANT			<u> </u>		
MAR :	3 1 2006			Joseph Young J. PAIK					
B	<u>y</u>)			FILING DATE		GROUP			
PATE FO	DEMPRESE	0		September 18,	2003				
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EXAMINER'S INITIALS	PATENT NO.	DATE		NAME	CLASS	SUBCLASS	FILING DATE		
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				E Conference on Decision					
EXAMINER				DATE CONSIDERED					

SHEET <u>2</u> OF <u>26</u>

INF	INFORMATION DISCLOSURE CITATION IN AN APPLICATION			ATTY. DOCKET NO. 007734 FPS/MMCS/APC		SERIAL NO. 10/665,165	
-		CATION -1449)					
				APPLICANT Joseph Young J.	. PAIK	-	·
				FILING DATE September 18, 2	003	GROUP	"
		Ţ	S.PATENT DO	CUMENTS			
EXAMINER'S INITIALS	PATENT NO.	DATE		NAME	CLASS	SUBCLASS	FILING DATE
	3,205,485	09/07/65	Noltingk				10/21/60
	3,229,198	01/11/66	Libby			<u> </u>	09/28/62
	3,767,900	10/23/73	Chao et al.				06/23/71
	3,920,965	11/18/75	Sohrwardy				03/04/74
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	4,302,721	11/24/81	Urbanek et al.		1		05/15/79
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INFORMATION DISCLOSURE CITATION IN AN APPLICATION (PTO-1449)		ATTY. DOCKET NO. 007734 FPS/MMCS/APC		SERIAL NO. 10/665,165			
		,		APPLICANT Joseph Young J	. PAIK	<u></u>	
				FILING DATE September 18, 2	2003	GROUP	
			S: PATENT DO	CUMENTS			
EXAMINER'S INITIALS	PATENT NO.	DATE		NAME	CLASS	SUBCLASS	FILING DATE
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INF	INFORMATION DISCLOSURE CITATION IN AN APPLICATION (PTO-1449)		SURE	ATTY. DOCKET NO. 007734 FPS/MMCS/APC		SERIAL NO. 10/665,165	
	(110	-1 44 7)		APPLICANT Joseph Young J.	PAIK	<u> </u>	
				FILING DATE September 18, 2	003	GROUP	
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INFORMATION DISCLOSURE ATTY. DOCKET NO. SERIAL NO. 007734 FPS/MMCS/APC 10/665,165 CITATION IN AN **APPLICATION** (PTO-1449) **APPLICANT** Joseph Young J. PAIK FILING DATE **GROUP** September 18, 2003 U.S. PATENT DOCUMENTS **EXAMINER'S FILING** PATENT NO. **INITIALS DATE NAME CLASS SUBCLASS** DATE 5,751,582 05/12/98 Saxena et al. 09/24/96 5,754,297 05/19/98 Nulman 04/14/97 5,761,064 06/02/98 La et al. 10/06/95 5,761,065 06/02/98 Kittler et al. 03/30/95 5,764,543 06/09/98 Kennedy 06/16/95 5,777,901 07/07/98 Berezin et al. 09/29/95 5,787,021 07/28/98 Samaha 12/18/95 5,787,269 07/28/98 Hyodo 09/19/95 5,808,303 09/15/98 Schlagheck et al. 01/29/97 5,812,407 09/22/98 Sato et al. 08/12/97 5,823,854 10/20/98 Chen 05/28/96 5,825,913 10/20/98 Rostami et al. 07/18/95 5,828,778 10/27/98 Hagi et al. 07/12/96 5,832,224 11/03/98 Fehskens et al. 06/14/96 5,838,595 11/17/98 Sullivan et al. 11/25/96 5,844,554 12/01/98 Geller et al. 09/17/96 5,857,258 01/12/99 Penzes et al. 05/12/94 5,859,964 01/12/99 Wang et al. 10/25/96 01/12/99 5,859,975 Brewer et al. 08/09/96 5,862,054 01/19/99 Li 02/20/97 5,863,807 01/26/99 Jang et al. 03/15/96 5,867,389 02/02/99 Hamada et al. 11/26/96 5,870,306 02/09/99 Harada 06/13/97 5,883,437 03/16/99 Maruyama et al. 12/28/95 5,889,991 03/30/99 Consolatti et al. 12/06/96 5,901,313 05/04/99 Wolfe et al. 09/02/97 5,903,455 05/11/99 Sharpe, Jr. et al. 12/12/96 5,910,011 06/08/99 Cruse 05/12/97 5,910,846 06/08/99 Sandhu -08/19/97 **EXAMINER** DATE CONSIDERED

SHEET <u>6</u> OF <u>26</u>

ATTY. DOCKET NO. SERIAL NO. INFORMATION DISCLOSURE 007734 FPS/MMCS/APC 10/665,165 **CITATION IN AN APPLICATION** (PTO-1449) **APPLICANT** Joseph Young J. PAIK **FILING DATE GROUP** September 18, 2003 U.S. PATENT DOCUMENTS **EXAMINER'S** FILING **INITIALS** PATENT NO. **DATE SUBCLASS NAME CLASS** DATE 06/15/99 5,912,678 Saxena et al. 04/14/97 5,916,016 06/29/99 Bothra 10/23/97 5,923,553 07/13/99 Yi 10/05/96 5,926,690 Toprac et al. 07/20/99 05/28/97 5,930,138 07/27/99 Lin et al. 09/10/97 5,940,300 08/17/99 Ozaki 05/08/97 5,943,237 08/24/99 Van Boxem 10/17/97 5,960,185 09/28/99 Nguyen 06/24/96 5,960,214 Sharpe, Jr. et al. 09/28/99 12/04/96 5,961,369 10/05/99 Bartels et al. 06/04/98 5,963,881 10/05/99 Kahn et al. 10/20/97 5,978,751 11/02/99 Pence et al. 02/25/97 5,982,920 11/09/99 Tobin, Jr. et al. 01/08/97 6,002,989 12/14/99 Shiba et al. 04/01/97 6,017,771 01/25/00 Yang et al. 04/27/98 6,036,349 03/14/00 Gombar 07/26/96 6,041,263 03/21/00 Boston et al. 10/01/97 6,041,270 03/21/00 Steffan et al. 12/05/97 6,054,379 04/25/00 Yau et al. 02/11/98 6,064,759 05/16/00 Buckley et al. 11/06/97 6,072,313 06/06/00 Li et al. 06/17/97 6,074,443 06/13/00 Venkatesh et al. 01/29/98 6,077,412 06/20/00 Ting et al. 10/30/98 6,078,845 06/20/00 Friedman 11/25/96 6,094,688 07/25/00 Mellen-Garnett et al. 03/12/98 6,097,887 08/01/00 Hardikar et al. 10/27/97 6,108,092 08/22/00 Sandhu 06/08/99 6,111,634 08/29/00 Pecen et al. 05/28/97 6,112,130 08/29/00 Fukuda et al. 10/01/97 **EXAMINER DATE CONSIDERED**

SHEET <u>7</u> OF <u>26</u>

SERIAL NO. ATTY. DOCKET NO. INFORMATION DISCLOSURE 007734 FPS/MMCS/APC 10/665,165 CITATION IN AN **APPLICATION** (PTO-1449) APPLICANT Joseph Young J. PAIK **FILING DATE GROUP** September 18, 2003 U.S. PATENT DOCUMENTS **EXAMINER'S FILING** INITIALS PATENT NO. DATE **NAME CLASS SUBCLASS** DATE 6,127,263 10/03/00 Parikh 07/10/98 6,128,016 10/03/00 Coelho et al. 12/20/96 6,136,163 10/24/00 Cheung et al. 03/05/99 6,141,660 10/31/00 Bach et al. 07/16/98 6,143,646 11/07/00 06/03/97 Wetzel 6,148,099 11/14/00 07/03/97 Lee et al. 6,148,239 11/14/00 Funk et al. 12/12/97 6,148,246 11/14/00 Kawazome 06/10/98 6,150,664 11/21/00 Su 06/29/99 6,159,075 12/12/00 **Zhang** 10/13/99 6,159,644 12/12/00 Satoh et al. 03/06/96 6,161,054 B1 12/12/00 Rosenthal et al. 09/17/98 6,172,756 B1 01/09/01 Chalmers et al. 12/11/98 6,173,240 B1 01/09/01 Sepulveda et al. 11/02/98 6,175,777 B1 Kim 01/16/01 01/16/98 6,178,390 B1 01/23/01 Jun 09/08/98 6,183,345 B1 02/06/01 03/20/98 Kamono et al. 02/06/01 6,185,324 B1 Ishihara et al. 01/31/95 6,191,864 B1 02/20/01 Sandhu 02/29/00 6,192,291 B1 02/20/01 Kwon 10/08/98 6,197,604 B1 03/06/01 Miller et al. 10/01/98 6,204,165 B1 03/20/01 Ghoshal 06/24/99 Atchison et al. 6,210,983 B1 04/03/01 06/15/99 6,211,094 B1 04/03/01 Jun et al. 08/23/99 6,214,734 B1 04/10/01 Bothra et al. 11/20/98 6,217,412 B1 04/17/01 Campbell et al. 08/11/99 6,219,711 B1 04/17/01 Chari 10/01/97 6,222,936 B1 04/24/01 Phan et al. 09/13/99 **EXAMINER DATE CONSIDERED**

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ATTY. DOCKET NO. SERIAL NO. INFORMATION DISCLOSURE 007734 FPS/MMCS/APC 10/665,165 CITATION IN AN **APPLICATION** (PTO-1449) **APPLICANT** Joseph Young J. PAIK **FILING DATE GROUP** September 18, 2003 U.S. PATENT DOCUMENTS **EXAMINER'S FILING INITIALS** PATENT NO. DATE **NAME CLASS SUBCLASS** DATE 05/01/01 6,226,792 B1 Goiffon et al. 10/14/98 6,236,903 B1 05/22/01 Kim et al. 09/25/98 2001/0001755 A1 05/24/01 Sandhu et al. 12/29/00 6,240,330 B1 05/29/01 Kurtzberg et al. 05/28/97 6,240,331 B1 05/29/01 Yun 08/18/98 2001/0003084 A1 06/07/01 **Finarov** 12/04/00 6,245,581 B1 06/12/01 Bonser et al. 04/19/00 6,246,972 B1 06/12/01 Klimasauskas 05/27/99 6,248,602 B1 06/19/01 Bode et al. 11/01/99 6,249,712 B1 06/19/01 Boiquaye 09/25/96 6,252,412 B1 06/26/01 Talbot et al. 01/08/99 6,253,366 B1 06/26/01 Mutschler, III 03/31/99 6,263,255 B1 07/17/01 Tan et al. 05/18/98 6,271,670 B1 08/07/01 Caffey 02/08/99 6,276,989 B1 08/21/01 Campbell et al. 08/11/99 6,278,899 B1 08/21/01 Piche et al. 10/06/98 6,280,289 B1 08/28/01 Wiswesser et al. 11/02/98 6,284,622 B1 09/04/01 Campbell et al. 10/25/99 6,287,879 B1 09/11/01 Gonzales et al. 08/11/99 6,292,708 B1 09/18/01 Allen et al. 06/11/98 6,298,274 B1 10/02/01 Inoue 09/01/99 6,298,470 B1 10/02/01 Breiner et al. 04/15/99 6,303,395 B1 10/16/01 Nulman 06/01/99 6,304,999 B1 10/16/01 Toprac et al. 10/23/00 2001/0030366 A1 10/18/01 Nakano et al. 03/07/01 6,307,628 B1 10/23/01 Lu et al. 08/18/00 6,314,379 B1 11/06/01 Hu et al. 12/04/97 **EXAMINER** DATE CONSIDERED

SHEET <u>9</u> OF <u>26</u>

ATTY. DOCKET NO. SERIAL NO. INFORMATION DISCLOSURE 007734 FPS/MMCS/APC 10/665,165 CITATION IN AN **APPLICATION** (PTO-1449) **APPLICANT** Joseph Young J. PAIK **FILING DATE GROUP** September 18, 2003 U.S. PATENT DOCUMENTS **EXAMINER'S FILING** INITIALS PATENT NO. DATE **SUBCLASS** NAME **CLASS** DATE 11/15/01 2001/0040997 A1 Tsap et al. 05/15/01 6,320,655 B1 11/20/01 Matsushita et al. 03/15/00 2001/0042690 A1 11/22/01 Talieh 12/14/00 2001/0044667 A1 11/22/01 Nakano et al. 05/16/01 6,324,481 B1 Atchison et al. 11/27/01 06/15/99 6,336,841 B1 01/08/02 Chang 03/29/01 6,340,602 B1 01/22/02 Johnson et al. 02/12/01 6,345,288 B1 02/05/02 Reed et al. 05/15/00 6,345,315 B1 02/05/02 Mishra 08/12/98 6,346,426 B1 Toprac et al. 02/12/02 11/17/00 2002/0032499 03/14/02 Wilson et al. 05/04/01 6,360,133 B1 03/19/02 Campbell et al. 06/17/99 6,360,184 B1 03/19/02 Jacquez 03/26/97 6,363,294 B1 03/26/02 Coronel et al. 12/29/98 6,366,934 B1 04/02/02 Cheng et al. 06/02/99 6,368,879 B1 04/09/02 Toprac 09/22/99 6,368,883 B1 04/09/02 Bode et al. 08/10/99 6,368,884 B1 04/09/02 Goodwin et al. 04/13/00 6,388,253 B1 05/14/02 Su 11/02/00 6,389,491 B1 05/14/02 Jacobson et al. 03/23/99 6,395,152 B1 05/28/02 Wang 07/02/99 6,397,114 B1 05/28/02 Eryurek et al. 05/03/99 6,400,162 B1 06/04/02 Mallory et al. 07/21/00 6,405,096 B1 06/11/02 Toprac et al. 08/10/99 6,405,144 B1 06/11/02 Toprac et al. 01/18/00 **EXAMINER** DATE CONSIDERED

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INF	INFORMATION DISCLOSURE CITATION IN AN APPLICATION (PTO-1449)			ATTY. DOCKET NO. 007734 FPS/MMCS/APC		SERIAL NO. 10/665,165	
		,		APPLICANT Joseph Young J.	PAIK		<u>-</u>
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Wilmer Cutler Pickering Hale and Dorr LLP 202.942.8400

Applicant(s):

Joseph Young J. PAIK

Application No.: 10/665,165

107262.179 US2

Filing Date:

September 18, 2003

Atty Docket No.: 007734 FPS/MMCS/APC

SMA/lrm

Entitled:

Feedback Control of a Chemical Mechanical Polishing Process for Multi-Layered Films

AUG 1 1 2004

RECEIPT IS ACKNOWLEDGED FOR THE FOLLOWING:

[X] Supplemental Information Disclosure Statement and 4 PTO-1449 Forms

[X] 26 References

PATENT/OFFICIAL

Docker No.: 007733 PPS/MMCS/APC

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Joseph Young J. PAIK

Serial No. 10/665,165

Group Art Unit:

Filed: September 18, 2003

Examiner:

For: FEEDBACK CONTROL OF A CHEMICAL MECHANICAL POLISHING PROCESS

FOR MULTI-LAYERED FILMS

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Honorable Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In accordance with the provisions of 37 C.F.R. 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the documents listed on the attached form PTO-1449. It is respectfully requested that the documents be expressly considered during the prosecution of this application, and that the documents be made of record therein and appear among the "References Cited" on any patent to issue therefrom. Copies of any cited U.S. Patents and U.S. Patent Publications are not being submitted in accordance with 37 CFR 1.98(a)(2)(i).

This Information Disclosure Statement is being filed within three months of the U.S. filing date OR before the mailing date of a first Office Action on the merits. No certification or fee is required.

In accordance with 37 C.F.R. § 1.97(g) and (h), the filing of this IDS should not be construed as a representation that a search had been made or that information cited is, or is considered to be, material to patentability as defined in 37 C.F.R.§ 1.56 (b), or that any cited document listed or attached is (or constitutes) prior art. Unless otherwise indicated, the date of

Serial No. 10/665,165

publication indicated for an item is taken from the face of the item, and Applicant reserves the right to prove that the date of publication is in fact different.

No fee is believed to be required; however, the Commissioner is authorized to charge any deficiency in any fees pursuant to 37 CFR § 1.17 associated with this communication and to credit any excess payment to Deposit Account No. 08-0219.

Respectfully submitted,

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INFORMATION DISCLOSURE

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APPLICATION

(PTO-1449)

ATTY. DOCKET NO. 007734 FPS/MMCS/APC

SERIAL NO. 10/665,165

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	(PTO-	1449)		APPLICANT Joseph Young	J. PAIK		
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(PTO-1449)					
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